

Guardian NEXA™ 6

Guardian NEXA™ 6 is a lower carbon glass that can help reduce the embodied carbon of the built environment – across a wide range of glazing applications.

Focused on the future, now.

Guardian NEXA 6 is the result of many different initiatives and endeavours across the fields of research, technical innovation and production efficiency. Hence the name, which is inspired by the idea of a nexus – a connection or series of connections at a central point. You could say Guardian NEXA 6 is where environmental stewardship and innovation converge.

Reduced embodied carbon.

Through research and development, technical innovation and manufacturing expertise we've reduced levels of embodied carbon compared to our standard float glass products. Guardian Nexa 6 has a reduced embodied carbon of more than 30% compared to standard 4mm Guardian ExtraClear™ float glass. This equates to an embodied carbon value of 6.38 kg CO₂e/m².*



Increased cullet, reduced consumption.

Guardian Glass is able to incorporate a higher cullet content – broken or rejected glass – in float glass produced in Europe, helping reduce the consumption of raw materials and energy. Each ton of cullet replaces approximately 1.2 tons of raw material and uses less energy in the production process, lowering CO₂ emissions by up to 315 kg.

*The embodied carbon reduction was calculated by comparing the estimated value for 4mm Guardian Nexa™ glass produced at our Guardian Glass Goole plant in the UK, and the estimated average value for 4mm Guardian ExtraClear™ glass produced in our European plants. The average embodied carbon value for Europe is based on the product's Embodied Carbon Factor (ECF) which was derived from the regional Life Cycle Assessment (LCA), using 2021 data from all Guardian Glass European plants, considered to be a representative average. The Guardian Nexa™ value and regional European average embodied carbon value are pending verification for conformance to ISO 14040/44, ISO 21930, and the Product Category Rules (PCR) through a program operator and independent reviewer. Numbers are subject to vary due to the critical review process. The new Guardian Nexa™ EPD and EU regional EPD are expected to be published by mid-2024.

The embodied carbon data is the CO₂ equivalent in kg per square meter of glass (CO₂ eq.), emitted during the glass production (A1-A3), and was calculated using a standard 4mm thickness, not the actual glass thickness. The A1 – A3 stages include the environmental impacts from the raw materials extraction and processing stage, raw materials transportation to the manufacturing site, and the manufacturing of the product.

Lower carbon, same great performance.

Guardian NEXA 6 can be used as a base or laminated glass with Guardian's high-performance coatings – like Guardian SunGuard™ and Guardian ClimaGuard™. As well as lowering embodied carbon, these combinations can also help improve energy efficiency throughout a building's life, and add security and sound reduction when laminated.

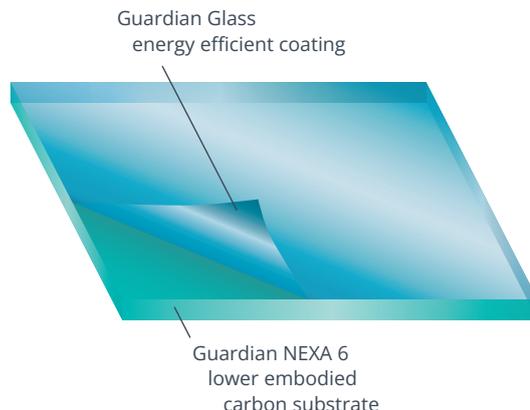


No compromise on aesthetics.

The lower carbon benefits of Guardian NEXA 6 don't mean compromising on performance or aesthetics. A vast array of Guardian Glass coatings are available with Guardian NEXA 6, allowing you to choose what you need – from neutral to colored and transparent to reflective.

Guardian NEXA 6 lower carbon glass applications.

Guardian NEXA 6 can be combined with all our high-performance coatings to offer many different benefits such as solar control, thermal insulation, light transmission and bird safety. Guardian NEXA 6 glass is suitable for new constructions or renovations, residential or commercial. It can replace standard float glass in glazing for facades, windows or roofs, and other exterior or interior applications such as railings, dividers and doors.



Here are just some of the possible combinations:

**Guardian SunGuard[®]
on NEXA[™]**

Guardian SunGuard coated glass adds outstanding solar control, yet also light transmission and high thermal insulation.

**Guardian ClimaGuard[™]
on NEXA[™]**

Guardian ClimaGuard coated glass helps make residential buildings more comfortable and energy efficient.

**Guardian Bird1st[™]
on NEXA[™]**

Guardian Bird1st[™] Lami glass helps prevent birds from colliding with buildings – with sequins that are highly visible to birds, yet discreet to humans.



Contact us to
find out more

 **GUARDIAN[®]
GLASS**
See what's possible[™]